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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,958	09/12/2003	Harlen Wheatley	010864.00101	6318
22908 75	11/14/2005		EXAM	INER
BANNER & WITCOFF, LTD. TEN SOUTH WACKER DRIVE SUITE 3000 CHICAGO, IL 60606			CHAWLA, JYOTI	
			ART UNIT	PAPER NUMBER
		•	1761	

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summany	10/660,958	WHEATLEY, HARLEN				
Office Action Summary	Examiner	Art Unit				
	Jyoti Chawla	1761				
The MAILING DATE of this communication apperiod for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	I. sely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
	s action is non-final.					
3) Since this application is in condition for allowa	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) 1-7 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-7</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers						
9) The specification is objected to by the Examine	er.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the E	xaminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date	5) Alaka at lata and 5	Patent Application (PTO-152)				



Application/Control Number: 10/660,958

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US Patent Number 4617270), in view of Vickers Jr. (US Patent Number 6846503 B2) and Markham (US patent Number 2892757). Further in view of Christensen (US Patent Number 2342330), Jacobs et al. (US Patent Number 3061438), and Van Gheluwe et al. (US Patent Number 4207345). Further, in view of Data Sourcebook for food scientists and Technologists, ISBN 1-56081-009-2), and http://www.dictionary.com.

For the purpose of this office action the following definitions of the term "vodka" are considered relevant: "Vodka" is neutral spirits so distilled, or so treated after distillation with charcoal or other materials, as to be without distinctive character, aroma, taste and color. (Data Sourcebook for food scientists and Technologists, page number 710, ISBN 1-56081-009-2)

An alcoholic liquor originally distilled from fermented wheat mash but now also made from a mash of rye, corn, or potatoes. (source: www.dictionary.com)

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- 2. In regards to claim 1, Anderson teaches a process of producing alcoholic beverage comprising steps of: preparation of corn mash by adding water to the prepared grain and cooking the corn mash in a continuous cooker, heating mash at a temperature and for a time within the recited range (Column 4, lines 3-9), transferring the cooked corn mash in a tank for cooling and holding for saccharification (Figure 1), transferring the cooled and cooked mash to fermentation tank, and fermenting the said mash with yeast to produce alcohol (Column2, lines 20-25), separating the alcohol from the solids and introducing the said alcohol to the beer still (Column 2 lines 65-68), vaporizing and concentrating the said alcohol in rectifying column of the still, and further distilling the said alcohol in a dehydration column to form absolute alcohol (column 3, lines 1-19).
- 3. Claim 1 recites the process of making Vodka. In view of the definitions of vodka set forth above, Anderson is inherently describing the process of making vodka, or it would have been obvious to modify Anderson and ensure production of a neutral spirit, which is the definition of vodka.
- 4. Claim 1 differs from Anderson in the recitation of particular species of corn, i.e., organic white corn, employed in the mash. The particular species of corn selected seem to have been nothing more than a routine determination.
- 5. Claim 1 further differs from Anderson in the recitation of fermentation time and temperature. Anderson is silent as to the time period for which the beverage is fermented, however, Vickers Jr. teaches the specifics of fermentation time and temperature (Column 2, lines 51-54), which fall in the desired range as described

by the applicant. Vickers Jr. also recites that it is well established in the art to maintain a constant temperature for time period of 5-7 days, for the yeast to ferment the sugars to make alcohol. Therefore, to modify Anderson, if necessary, to ferment the corn mash for at least five days, in view of Vickers Jr., is seen to have been obvious.

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- 6. Claim 1 further differs from Anderson in the recitation of distillation steps. A series of conventional stills are used in order to purify alcohol to 80% or more by volume, and the use of doubler has been made to concentrate the alcohol mixture. Anderson, distills the alcohol through the beer still rectifying column to separate vapor of alcohol relatively free of water and obtaining absolute alcohol after azeotrophic distillation in dehydration column (column 2, lines 67-68; column 3 lines 1-15), thereby achieving the desired purity. Whether one chooses to achieve the purity desired through one still or a number of conventional stills is seen to have been obvious, especially since Vickers Jr. discloses the distillation column temperatures in the range described by the applicant, and also teaches the use of more than one distillation columns, if required, (column3, lines 6-8).
- 7. Claim 1 further differs from Anderson, in the recitation of storing the distilled product for certain time period. Anderson is silent as to whether the alcohol is stored or not. However, as evidenced by Vickers Jr., it is of course well established in the art to store the distilled beverage for time sufficient to age the product to the desired degree based on individual preference. Therefore, to modify Anderson, if necessary, and store the distilled beverage, for it's art recognized and the applicant's intended function would have been obvious.

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- Finally, Claim 1 also recites adding limestone water to the distilled 8. beverage to purify and dilute vodka, to at least 45% alcohol by volume. Anderson is silent as to the strength of alcohol and as to the use of any filter to purify the alcohol. However, the combination of Vickers Jr. and Markham, teaches that it is well established in the art to use a filter to remove impurities from the alcoholic spirit. Vickers Jr. discloses a use of any effective filter to remove the impurities and smell from alcohol fraction (Column 3, lines 31-35). Further, Vickers Jr. teaches, that it is well known in the art to dilute the strength of the alcoholic spirit to the desired level with water (column 5, lines 60-65), as intended by the applicant. As to the use of limestone as filtering material, it has been well known in the art, as Markham discloses that limestone removes the particulate impurities as well as the odor causing impurities from the alcohol (Column 9, lines 15-20). Therefore, it would have been obvious at the time of the invention was made to the one skilled in the art, to use limestone and water to filter and dilute the distilled alcohol to render the final product odor-free and with desired strength.
- 9. Christensen, Jacobs et al., Van Gheluwe et al., are further evidence of the conventional steps of alcoholic beverage making, including vodka. For example, Christensen discloses a method used for the treatment of grains to make mash, where the saccharification of grains is done for the production of alcohol, and the process includes steps, temperature and time ranges in the same range as the applicant (Flow diagram and column 1, lines 5-25 and column 2, lines 7-15).

Van Gheluwe et al. recites, that the steps like grinding cereals, making and cooking mash, subsequently cooling mash prior to fermentation, are considered conventional in the art of brewing and are well documented (US Patent Number 4207345; Column 1, lines 5-15). Jacobs discloses, that grain alcohol suitable for vodka manufacture can be obtained by distilling the grain (corn) beer in a "beer still", and subsequently subjecting the distillate to a series of fractionation treatments (column 1, lines 11-37). Jacobs also describes, the main difference between processing grain alcohols to make other distilled beverages and Vodka is the special emphasis on removal of congenerics in order to improve quality of distilled liquor produced.

10. Claims 2 –7 differ from Anderson, as they describe specific batch sizes and time periods that are best suited to distill the batches before tasting.

Anderson is silent in regards to batch sizes, however, Vickers clearly discloses that his invention is described for batch processing of alcoholic spirits, in general, and many variations and modifications may be considered obvious to those skilled in the art (column 6, lines 7-13). condensing the distillate steam. Vickers is silent as to the reflux of distillate steam through the closed column for the time depending on the batch size, however, to increase the time of distillation in accordance with a corresponding increase in batch size is a well-recognized derivation in the art, and thus applicant's intended purpose is seen to have been obvious.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. It is noted that Cunningham (US Patent Number 4035515), describes making alcohol from cereal grains, including corn, and provides details of grain processing prior to making mash.

- 12. It is noted that Reich (US Patent Number 2127138), discloses the process of distillation as early as 1938.
- 13. It is noted that Lutzen (US Patent Number 4316956), discloses details of fermentation process of corn grits.
- 14. It is noted that Hendel et al. (US Patent Number 2879165), disclose purification of alcohol for making of beverages including vodka.
- 15. It is noted that Shinsky (US Patent Number 4358346 and 4502921), discloses a detailed process of control of distillation to produce alcohol for any use including beverages.
- 16. It is noted that Torii (US Patent Number 5208054), discloses a process of making alcoholic beverages with improved flavor.
- 17. It is noted that Kirby et al. (US Patent Number 4490469), discloses a detailed method of making alcohol from corn and provides details of fermentation process including batch sizes for raw materials, etc.
- 18. It is noted that Statham et al. (US Patent Number 4636389), disclose the importance of cooking mash (temperature and pressure ranges) prior to fermentation and its impact on the final product.
- 19. It is noted that Vialatte nee Geolier (US Patent Number 4461778), discloses use of calcium carbonate (limestone) in de-acidification of food liquids.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jyoti Chawla whose telephone number is (571) 272-8212. The examiner can normally be reached on 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jyoti Chawla

Examiner Art Unit 1761

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STEVE WEINSTEIN
PRIMARY EXAMINER 176